



ADVISORY COMMITTEE ON BIOTECHNOLOGY Committee Members

CED CHAIR

John Garamendi, Lieutenant Governor

Lieutenant Governor John Garamendi served in the State Assembly from 1974-1976 and in the State Senate from 1976-1990, including a term as Senate Majority Leader. He became California's first elected Insurance Commissioner, serving from 1991-1995, then was appointed by President Bill Clinton as the Deputy Secretary of the U.S. Department of the Interior from 1995-1998. He returned to the California Department of Insurance in 2003, after his reelection as Insurance Commissioner. Lt. Governor Garamendi was elected as Lieutenant Governor in November 2006.

COMMITTEE CHAIR

Virginia Chang Kiraly, CED Commissioner

Ms. Chang Kiraly, of Menlo Park, has owned Knitting Girls since 2004. She previously was a senior director for the Nasdaq Stock Market from 2000 to 2002 and an investment executive for Paine Webber from 1995 to 2000. Prior to that, Ms. Chang Kiraly was a sales associate for institutional fixed income sales and trading for Bear, Stearns & Company from 1993 to 1994 and an account executive for Alex Brown & Sons from 1991 to 1993. She is a member of the Asia America Multitechnology Association (AAMA) and Las Lomitas Education Foundation. She is also past president of the Las Lomitas PTA Executive Board.

MEMBERS

Carl Engle – Partner, Monitor Group – Los Angeles

Carl Engle has more than 12 years of consulting experience. His focus is on the biotechnology industry. He has worked with several of the world's largest biopharmaceutical and medical device companies. Carl has helped his clients throughout the healthcare value chain, from improving processes to move drugs through the pipeline faster to commercialization and life cycle management. Carl has helped companies on a variety of issues from executive development, commercial strategy and organizational design.

Beyond his work with clients, Carl has also played a key role in developing the Life Sciences cluster strategy for the State of California. As part of this report, Carl met with a wide range of constituents in the industry and helped craft the report's recommendations.

Matthew Gardner – President and CEO, BayBio – S. San Francisco

Matthew M. Gardner is President and CEO of BayBio, the voice of the life science industry in Northern California, headquartered in South San Francisco. In total, BayBio serves the community of 900+ life science companies in Northern California, their 90,000 employees, and the supporting communities of suppliers, service firms and other stakeholders. Mr. Gardner oversees BayBio's activities in advocacy, industry advancement, membership benefits and communications. On behalf of industry, Mr. Gardner represents BayBio in industry bodies and roundtables including the Biotechnology Industry Organization, the Council of State Bioscience Associations, the Global Bioscience Partnership, and other coalitions and business development groups.

He has contributed content to a broad range of publications, from biotechnology articles in *Manufacturing Today* and *Helix International* magazines to white papers on enterprise development and innovation policy.

Terese Ghio – VP, Government Relations, Arena Pharmaceuticals – San Diego

Ms. Ghio serves as Vice President Government Relations, Arena Pharmaceuticals. She is a Biotech executive with over 25 years experience with a unique combination of operational expertise paired with government relations and compliance knowledge. She co-chairs the BIOCOM legislative committee and is a very active member of the Biotech community on the local state and federal levels. Ms. Ghio is a Governor's appointee to the California Colorado River Board.

Dr. David Gollaher – President and CEO, California Healthcare Institute – La Jolla

Dr. Gollaher joined CHI in 1993 as Director, moving to President and CEO a year later. Previously he was vice president of Scripps Clinic and Research Foundation, with responsibility for clinical operations, business development and managed care. Previously he served on the faculties of Harvard, UCSD and the Graduate School of Public Health at SDSU. Earlier in his career he held executive positions at Young & Rubicam New York and McCann Erickson. He is an award-winning author in the fields of science and medicine, and has written three books and numerous articles in the fields of health policy, the economics of biomedical research and development, bioethics and the history of medicine. In 2007 he became co-publisher and editorial director of *The Journal of Life Sciences*. He earned his undergraduate degree with honors from UCSB, and Masters and Ph.D. degrees from Harvard University. He has received fellowships from Harvard's Houghton Library, the National Endowment for the Humanities, and the Massachusetts Historical Society. Presently he serves on the boards of CHI, the California Biotechnology Foundation, and the J. David Gladstone Institutes. Dr. Gollaher is also a co-founder and board member of Vision Robotics Corporation, and holds six patents in the field of vision-based autonomous robotic navigation.

Dr. Steve Heinemann – Salk Institute Faculty Member – San Diego

Stephen F. Heinemann, a professor in the Molecular Neurobiology Laboratory, studies the molecular details of communication among brain cells. His work focuses on receptors, structures in the brain that receive chemical messages from other brain cells. His lab was among the first to determine the molecular organization of receptors and to reveal that there is an unexpectedly large variety in the brain. Among other notable achievements, his lab has isolated a gene containing the blueprints for a receptor critical to learning and memory, and identified the receptors that respond to nicotine. Since neurological ailments, such as Alzheimer's and Parkinson's, drug addiction, and mental

disorders such as depression and schizophrenia, are fundamentally disorders of brain cell communication, this research will provide new insights into the treatment of these disorders. Discoveries in Dr. Heinemann's lab are currently being used by pharmaceutical and biotechnology companies to develop drugs for stroke, epilepsy, Parkinson's, and Alzheimer's diseases, as well as mental conditions such as nicotine addiction, depression, and schizophrenia.

David Mack, Ph.D. - Director, Alta Partners – San Francisco

David joined Alta in 2002, and focuses on investments in biopharmaceutical products and therapeutics. He currently serves on the Board of Directors of Aerie Pharmaceuticals, aTyr Pharma, Ceregene, FAB, Intradigm and Proacta Therapeutics. Prior to Alta, David co-founded and served as Vice President of Genomics Research at Eos Biotechnology (acquired by Protein Design Labs in 2003). From 1995 to 1997, he served at Affymetrix as Head of Cancer Biology where he oversaw the development and application of DNA array technology in the areas of oncology and inflammation. David was also a pivotal member of the Polymerase Chain Reaction (PCR) invention group at Cetus (now Chiron) in the mid 1980s. David has co-authored more than 30 scientific articles and reviews, including papers published in Cell, Science, and Nature, and is an inventor on 23 US patents. He was an American Cancer Society postdoctoral fellow at Stanford University School of Medicine in Microbiology and Immunology. David received his Ph.D. in 1992 from the University of Chicago where he was a Howard Hughes fellow in Molecular Genetics and Cell Biology. David holds a Bachelor of Arts in Molecular Biology from the University of California, Berkeley.

Susan Molineaux - CEO, Proteolix, Inc. – South San Francisco

She has served as the Chief Executive Officer of Proteolix, a company developing products that target certain cancers and immunological conditions, since January, 2006 and has worked with the company since its founding in 2003. Prior to joining Proteolix, Dr. Molineaux was at Rigel Pharmaceuticals in South San Francisco, where she was VP of Biology. Before that, she was VP of Biology at Praelux in Lawrenceville, NJ. Dr. Molineaux also served as VP of Drug Development at Praecis Pharmaceuticals in Cambridge, MA and was a scientist in the Immunology group at Merck. Susan M. Molineaux received a B.S. in Biology from Smith College, a Ph.D. in Molecular Biology from Johns Hopkins University, and completed a postdoctoral fellowship at Columbia University.

Joseph D. Panetta – President and CEO, BIOCOM - San Diego

Joseph Panetta is President and CEO and a member of the Board of Directors of BIOCOM, the regional association representing over 450 biotechnology, medical device, diagnostics, medical equipment and bioagriculture companies in the San Diego area, and the considerable number of service sector companies, civic organizations, municipalities, as well as the universities, colleges and biomedical research institutions in the San Diego region. As President and CEO, Mr. Panetta is responsible for executing on BIOCOM's mission of serving as a catalyst in positioning the San Diego biotechnology community to achieve global success working with a staff of 14 and a 52 member Board of Directors. Mr. Panetta has been actively involved in biotechnology product development and commercialization for more than 20 years.

Evan Siegel - Chairman, CEO, Ground Zero Pharmaceuticals - Irvine

Dr. Siegel founded GZP in 1999 from his consulting firm, Ground Zero Strategies, Ltd. He served as Consultant and then Chief Executive Officer of OXO Chemie Inc. from

1997 to 1999. Before he joined OXO Chemie, he was the Vice President, Regulatory Affairs and Bioethics for Medical Science Systems, Inc., now Interleukin Genetics. Prior to that position, he was Director of Regulatory Consulting Services and Principal Regulatory Scientist for Quintiles, Inc., in Research Triangle Park, North Carolina. Dr. Siegel has held positions as a Toxicology Reviewer at the US Food and Drug Administration and Food and Drug Branch, California Department of Health Services and, at the latter, was Supervising Toxicologist and Chief of Special Services. He has served in regulatory affairs and executive positions in both the pharmaceutical industry (Astra, Syntex, Medical Science Systems and OXO Chemie) and trade association environments. He attended the Waksman Institute of Microbiology where he earned both his Master and Doctor of Philosophy degrees in Virology and Molecular Biology. He is an Adjunct Professor in the Centre for Integrated Preclinical Drug Development, University of Queensland, Australia. Dr. Siegel is the Chairman of the GZP Board of Directors.